

ABSTRACT

Methods are provided for improving servo-demodulation robustness, especially when used with a disk having zone bit recorded servo wedges. A servo address mark (SAM) pattern is searched for, within a servo wedge, at a first nominal frequency useful for searching for the SAM pattern if the servo wedge is within a first zone. The SAM pattern is also searched for, within the same servo wedge, at a second nominal frequency useful for searching for the SAM pattern if the servo wedge is within the second zone. A determination of which one of two zones a head is reading, can then be based at least in part on which nominal frequency was used to successfully detect the SAM pattern.